Current Status of Claims

1-13. (cancelled)

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- 14. (*currently amended*) An apparatus for the transmission of power from a motor (2) to a functional unit (1) via a flywheel (8) which forms a part of a power transmission device (7), characterised in
- that the <u>power</u> transmission device (7) comprises <u>comprising</u> as part thereof a mechanism (9) in the form of a clutch (9) which has means for <u>sudden slip free</u> power engagement with a coupling device (10), and wherein the clutch mechanism (9) forms forming further connection with the functional unit;
- that said <u>clutch</u> mechanism (9) <u>consists</u> including of one or more movable engagement blocks (28, 29), which are mounted on a guide device (28', 28", 29', 29", 32, 33) for radially outward movement via centrifugal force during increasing rotation of said flywheel,
- <u>said coupling device including a rotating part with cam shaped</u> engagement means,
- that power transmission to the functional unit (1, 4) is designed to take taking place when the rotational speed of the flywheel (8) passes a defined predetermined threshold value wherein; and
- that the movable engagement block or blocks-are designed, move radially outwards through use of centrifugal force during the 20 increasing rotational speed of the flywheel, to-move-radially outwards either gradually or suddenly, and at a predetermined rotational-speed-to[,] to suddenly engage with the cam shaped engagement means (37', 37"), e.g., a block or blocks on fal the rotating part (37) of the coupling device (10), e.g., a rotating plate, 25 which is a part of the power transmission device (7) and which forms further connection to the functional unit (1), and wherein the means for slip free power engagement include a contact surface formed on the one or more engagement blocks for slip free engagement with the cam shaped engagement means at the instant 30 that engagement occurs between the movable engagement block or blocks and the cam shaped engagement means.

- 15. (*currently amended*) An apparatus as disclosed in claim 14, including means for reversing the normal rotational direction of the motor wherein characterised in
- that said mechanism is deactivatable either by reversing the normal rotational direction of the motor with the reversing means, or on cessation of the rotation of the flywheel, or in that the by letting rotational speed of the flywheel is come below [a] the predetermined threshold value, so as to cause said engagement block or blocks to suddenly disengage from said cam shaped engagement means.

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- 16. (*currently amended*) An apparatus as disclosed in claim 14, including means for adjusting the guide device of the clutch mechanism characterised in
- that to render time-to-engagement of the <u>clutch</u> mechanism [is] adjustable as a function of the rotational speed of the flywheel.
- 17. (*currently amended*) An apparatus as disclosed in claim 14, wherein said clutch mechanism includes at least one pair of movable engagement blocks is used, characterised in
- that the and the guide device consists of includes an articulated arm device common to the pair of movable engagement blocks whose with articulated arms that are pivotally connected to the flywheel.
- 18. (*currently amended*) An apparatus as disclosed in claim 14, wherein characterised in
- that there is provided at least one pair of diametrically arranged engagement blocks.
- 19. (*currently amended*) An apparatus as disclosed in claim 14, characterised in wherein
- that the coupling device is a rotating plate forming comprises an adjustable slip coupling with said functional unit.
- 20. (*currently amended*) An apparatus as disclosed in claim 14, characterised in wherein
- that the mechanical transmission engagement or disengagement of the flywheel is centrifugal force based.

- 21. (*currently amended*) An apparatus as disclosed in claim 14, characterised in wherein
- that the power transmission device is designed includes means for mechanically disconnecting the power transmission device from the functional unit after their engagement, in the event of a predetermined working resistance being exceeded, to cause at least partial deactivation of said mechanism for such that disconnection of power transmission from the coupling device to the functional unit is accomplished by mechanically disconnecting [;]
- that said deactivation involves the flywheel with its rotational energy being mechanically disconnected from the coupling device; and
 - that said disconnection of the rotational energy of the flywheel is being centrifugal force controlled.
 - 22. (*currently amended*) An apparatus as disclosed in claim 14, characterised in wherein
 - that the functional unit includes means for disintegrating or compacting is designed and dimension to disintegrate or compact articles selected from the group consisting of:
 - a) articles in the form of packaging, for example, electable from a group of: bottles, cans, beverage cartons, trays or boxes, and accessories for same;
 - b) articles made of plastics material, glass, light metal or thin metal, e.g., tin;
 - c) articles of biologically degradable material, for instance, selected from wood, plants, plant debris, paperboard, starch-based material and cellulose-based material; and,
 - d) packaging of biologically degradable material selected from paperboard, starch-based material and cellulose-based material.
 - 23. (*currently amended*) An apparatus as disclosed in claim 22, wherein characterised in that the apparatus is designed and dimensioned for handling or processing articles elected from group a) in a reverse vending machine.

24.-25. (cancelled)

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26. (*new*) An apparatus for the transmission of power from a motor to a functional unit via a flywheel which forms a part of a power transmission device,

- the power transmission device comprising as part thereof a mechanism in the form of a clutch mechanism which has means for slip free power engagement with a coupling device, the clutch mechanism forming further connection with the functional unit;

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- said clutch mechanism including one or more movable engagement blocks, which are mounted on a guide device for radially outward movement via centrifugal force during increasing rotation of said flywheel,
- said coupling device including a rotating part with cam shaped engagement means,
- power transmission to the functional unit taking place when the rotational speed of the flywheel passes a predetermined threshold value wherein
- the movable engagement block or blocks, move radially outwards through use of centrifugal force during the increasing rotational speed of the flywheel, wherein the engagement block or blocks are configured such that at a predetermined rotational speed of the 20 flywheel, the engagement block or blocks suddenly engage with the cam shaped engagement means on the rotating part of the coupling device which is a part of the power transmission device and which forms further connection to the functional unit, and wherein the 25 means for slip free power engagement include a contact surface formed on the one or more engagement blocks for slip free engagement with the cam shaped engagement means at the instant that engagement occurs between the movable engagement block or blocks and the cam shaped engagement means, wherein at least one pair of said engagement blocks is used and wherein 30
 - the guide device consists of an articulated arm device common to the pair of engagement blocks, with articulated arms that are pivotally connected to the flywheel.

- 27. (*new*) An apparatus as disclosed in claim 26, including means for reversing the normal rotational direction of the motor wherein
- said mechanism is deactivatable either by reversing the normal rotational direction of the motor, or on cessation of the rotation of the flywheel, or by letting rotational speed of the flywheel come below the predetermined threshold value, so as to cause said engagement block or blocks to suddenly disengage from said cam shaped engagement means.

- 28. (new) An apparatus as disclosed in claim 26, including means for adjusting the guide device of the clutch mechanism to render time-to-engagement of the clutch mechanism adjustable as a function of the rotational speed of the flywheel.
- 29. (*new*) An apparatus as disclosed in claim 26, wherein said engagement means, includes at least one pair of diametrically opposite engagement blocks.
- 30. (new) An apparatus as disclosed in claim 26, wherein
- the coupling device is a rotating disc forming an adjustable slip coupling.
- 31. (new) An apparatus as disclosed in claim 26, wherein
- the mechanical transmission engagement or disengagement of the flywheel is centrifugal force based.
- 32. (new) An apparatus as disclosed in claim 26, wherein
- the power transmission device including means for disconnecting the power transmission device from the functional unit after their engagement, in the event of a predetermined working resistance being exceeded, to cause disconnection of power transmission from the coupling device to the functional unit by mechanically disconnecting the flywheel with its rotational energy from the coupling device;
- said disconnection of the rotational energy of the flywheel being centrifugal force controlled.

33. (new) An apparatus as disclosed in claim 26, wherein

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- the functional unit includes means for disintegrating or compacting articles selected from the group consisting of:
 - a) articles in the form of packaging, electable from a group of: bottles, cans, beverage cartons, trays or boxes, and accessories for same;
 - b) articles made of plastics material, glass, light metal or thin metal;
 - c) articles of biologically degradable material, selected from, wood, plants, plant debris, paperboard, starch-based material and cellulose-based material; and,
 - d) packaging of biologically degradable material selected from paperboard, starch-based material and cellulose-based material.
- 34. (*new*) An apparatus as disclosed in claim 33, wherein the apparatus is for handling or processing articles elected from group a) in a reverse vending machine.

- 35. (*new*) An apparatus for the transmission of power from a motor to a functional unit via a flywheel which forms a part of a power transmission device.
- the power transmission device comprising as part thereof a mechanism in the form of a clutch which has means for sudden power engagement with a coupling device, the clutch mechanism forming further connection with the functional unit;

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- said clutch mechanism including one or more movable engagement blocks, which are mounted on a guide device for radially outward movement via centrifugal force during increasing rotation of said flywheel,
- said coupling device including a rotating part with cam shaped engagement means,
- power transmission to the functional unit taking place when the rotational speed of the flywheel passes a predetermined threshold value wherein
- the movable engagement block or blocks, move radially outwards through use of centrifugal force during the increasing rotational speed of the flywheel, wherein the engagement block or blocks are configured such that at a predetermined rotational speed of the flywheel the engagement block or blocks suddenly engage with the cam shaped engagement means on the rotating part of the coupling device which is a part of the power transmission device and which forms further connection to the functional unit, and wherein the means for sudden power engagement include a contact surface formed on the one or more engagement blocks for slip free engagement with the cam shaped engagement means at the instant that engagement occurs between the movable engagement block or blocks and the cam shaped engagement means, wherein
- the guide device includes an articulated arm device common to at least one pair of said engagement blocks with articulated arms pivotally connected to the flywheel, and
 - at least one pair of said engagement means are diametrically arranged in the form of diametrically opposite engagement blocks.

- 36. (*new*) An apparatus as disclosed in claim 35, including means for adjusting the guide device of the clutch mechanism to render time-to-engagement of the clutch mechanism adjustable as a function of the rotational speed of the flywheel.
- 37. (new) An apparatus as disclosed in claim 35, wherein
- the mechanical transmission engagement or disengagement of the flywheel is centrifugal force based.
- 38. (new) An apparatus as disclosed in claim 35, wherein

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- the power transmission device includes means for mechanically disconnecting the power transmission device from the functional unit after their engagement, in the event of a predetermined working resistance being exceeded, such that disconnection of power transmission from the coupling device to the functional unit is accomplished by mechanically disconnecting
- the flywheel with its rotational energy from the coupling device;
- said disconnection means of the rotational energy of the flywheel being centrifugal force controlled.
- 39. (*new*) An apparatus as disclosed in claim 35, wherein the functional unit includes means for disintegrating or compacting articles selected from the group consisting of:
 - a) articles in the form of packaging, electable from a group of: bottles, cans, beverage cartons, trays or boxes, and accessories for same;
 - b) articles made of plastics material, glass, light metal or thin metal:
 - c) articles of biologically degradable material, selected from, wood, plants, plant debris, paperboard, starch-based material and cellulose-based material;
 - d) packaging of biologically degradable material selected from paperboard, starch-based material and cellulose-based material.
- 40. (*new*) An apparatus as disclosed in claim 35, wherein the apparatus is for handling or processing articles elected from group a) in a reverse vending machine.